**G20 COMPENDIUM OF GOOD PRACTICES FOR PROMOTING INTEGRITY AND TRANSPARENCY IN INFRASTRUCTURE DEVELOPMENT**

Preamble

Quality infrastructure supports sustainable growth, improves well-being and generates jobs. Recognising this, quality infrastructure is both an explicit goal and enabler of the 2030 sustainable development agenda. However, solely focussing on increased financing is not sufficient. Better governance of infrastructure projects is key to increase both the volume and quality of infrastructure investments by addressing governance shortcomings that can cause delays, raise costs and debts for governments and private investors, hamper fair competition and undermine the quality of the infrastructure project ultimately undermining economic and social progress (OECD, 2017). Integrity and transparency are crucial for countering corruption effectively and the delivery of quality infrastructure. Consequently, this Compendium does not look at secondary consequences of corruption in infrastructure, but focuses on transparency and integrity in the infrastructure cycle.

Infrastructure development can indeed be particularly vulnerable to corruption and fraud due to its size and complexity, investment value, and the number of stakeholders involved. The integrity risks are considerable at each stage of the infrastructure project cycle (see Figure 1). Governments are required to navigate various sectors and industries, bringing together a multitude of actors and that may pose various corruption risks. From the exercise of undue influence or capture during the preliminary stages, including the needs definition and selection stages, to suboptimal performance in the implementation and maintenance phases, corruption can derail the effective delivery of infrastructure projects and divert investment from its intended use.

Figure 1. Evolving corruption risks throughout the life cycle of infrastructure project
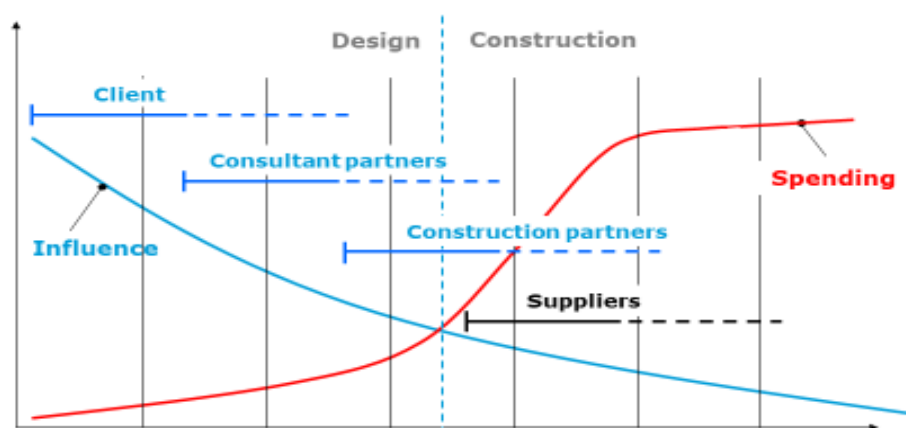
Source: Developed by the OECD

The same principles that drive or should drive countries' efforts to fight corruption and safeguard integrity in society apply to the context of infrastructure governance. The UN Convention against Corruption (UNCAC) binds all G20 members and beyond, and is the accepted international framework for prevention, criminalisation, international cooperation and asset recovery. It provides for a comprehensive approach for preventing and prosecuting corruption, and includes measures directed at integrity in the public service, including managing conflict of interest, strengthening transparency, establishing effective systems of audit and oversight, providing protection of whistleblowers and witnesses, effective criminalisation and law enforcement and international cooperation. The OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (OECD Anti-Bribery Convention) and its accompanying 2009 Anti-Bribery Recommendation focus on the "supply side" of foreign bribery. They set standards for an effective legislative and enforcement framework for combating foreign bribery, and address related issues aimed at enhancing prevention, through the promotion of corporate anti-corruption compliance, and detection, through the development of reporting channels for public officials, promotion of whistleblower protection.

Contributing to the implementation of the UNCAC and the OECD Anti-Bribery Convention and complementing it, the G20 has adopted a number of Principles that can support countries' efforts to ensure integrity and transparency throughout the entire infrastructure cycle when applied to this sector:

- o G20 High-Level Principles for Preventing and Managing 'Conflict of Interest' in the Public Sector (2018)
- o G20 High-Level Principles for Preventing Corruption and Ensuring Integrity in State-Owned Enterprises (2018)
- o G20 High Level Principles on Organizing Against Corruption (2017)
- o G20 Principles for Promoting Integrity in Public Procurement (2015)
- o G20 Open Data Principles (2015)

I. Promoting integrity and transparency in infrastructure throughout the entire infrastructure cycle requires a holistic approach

Applying integrity and transparency principles to the infrastructure sector requires to go beyond traditional, siloed approaches and to involve the various stakeholders in a holistic approach (OECD, 2016). For instance, a country's wider public integrity system requires public officials, in all relevant departments including national debt management offices, to fulfil their duties in line with laws, relevant codes and, where applicable, international standards of behaviour. Such a holistic approach has also been engaged for instance by the United Nations Economic Commission for Europe with the establishment of international Standards on a Zero Tolerance Approach to Corruption in Public-Private Partnership Procurement.[1] In the context of public infrastructure projects, similar standards and expectations, as appropriate, should be extended to the myriad of actors involved, including private sector employees such as suppliers, lenders, sub-contractors and consultants. Oversight should be effective throughout the project cycle with effective internal control and external audit in all stages of the procurement process. Whistleblower hotlines and other reporting mechanisms should be available to all stakeholders, public and private sector employees, and citizens. There should be clear rules and guidelines on preventing and managing conflict of interests. Transparency and open data principles should be widely applied in order to prevent and detect corruption.

Following the infrastructure cycle, this Good Practice Compendium identifies specific measures to strengthen integrity and transparency at each phase of the infrastructure cycle.

I.I. Needs definition and selection phase

The infrastructure cycle starts with the definition of the needs and the identification of the best way to respond to this need. The identification and selection process of investment projects often involves significant discretion on the part of public officials, along with the participation of multiple stakeholders, which may make this stage particularly prone to corruption and policy capture (OECD, 2016).

Enhancing transparency and integrity can contribute to ensuring that the process is carried out based on legitimate policy priorities. Specific policy options could include:

- Ensuring that public investment decisions are based on national, regional and sectorial objectives, for instance by:

  - Establishing a national long-term strategic vision that addresses infrastructure service needs in the medium to long term. The 2012 National Policy Strategy for Infrastructure and Spatial Planning (SVIR) in the Netherlands provides a holistic perspective on infrastructure planning by creating a platform for co-ordinating planning across sectors. The SVIR links spatial developments and infrastructure within a broad vision for the future of the country in 2040. It covers infrastructure development for passenger, freight transport across all modes, energy

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[1] UNECE, *Standards on a Zero Tolerance Approach to Corruption in PPP Procurement*, ECE/CECI/WP/PPP/2017/4, Geneva, 2017.

(electricity transport, renewables, and oil and gas), and the water system and thereby ensuring that sufficient space is available to meet the country's current and future infrastructure needs and balance the different uses of land, subsoil and the sea while safeguarding the quality of the environment (OECD, 2017).

- Setting up an expert body, where appropriate, responsible for assessing the national infrastructure needs such as the National Infrastructure Commission in the United Kingdom responsible for expert advice to the Government on Infrastructure.

- Co-ordination with sub-national governments to ensure that strategic priorities for investment are aligned across levels of government. For example, the Council of Australian Governments is the main forum for infrastructure development and implementation of inter-jurisdictional policy. Through the Council, the federal and subnational governments have agreed to a national port strategy.

- Establishing a national information portal to serve as a point of reference for land use planning for government institutions and the public. For example, in Indonesia, the One Map Policy, compiling 83 thematic maps, including the National Sea Spatial Plan Map (RTRLN), the sub-district and village border map, aims to foster collaboration, transparency and accountability. In this way, infrastructure development can be more accurately planned by using a mix of data, which includes spatial and land use information. In South Africa, the Presidential Infrastructure Coordinating Commission (PICC) was established to integrate and coordinate the long-term infrastructure building programme across all spheres of government, state agencies as well as social partners through the the National Infrastructure Plan, which is a 20 year planning framework. The PICC sets short and long-term goals to promote development objectives, expand maintenance of new and existing infrastructure, extend infrastructure to poor and rural areas, addressing capacity and necessities in areas such as rail, road, energy and water. Through spatial mapping of infrastructure gaps, eighteen Strategic Integrated Projects have been developed and approved to support economic development and address service delivery in the poorest provinces.

- Preventing the selection of public investment from favouring a particular interest group/individual over the public interest, for instance by:

    - Rendering the decision-making process more transparent by making information available publicly. For example, in Australia, "in order to draw the market's early attention to potential procurement opportunities, each relevant entity must maintain on AusTender [the national public procurement system] a current procurement plan containing a short strategic procurement outlook" (World Bank, 2016).

    - Strengthening citizen participation through participatory budgets, which have been used increasingly on the different levels of government, such as Paris, France and Porto Alegre, Brazil. In Porto Alegre, budget allocations for public welfare works are made only after the recommendations of public delegates and approval by the city council.

I.II. Appraisal phase

The appraisal phase serves to evaluate an infrastructure project's feasibility, to give the official approval and to determine how and by whom it will be financed. It can be difficult to assess the cost of government-led investment projects, and especially infrastructure projects, where comparable information is not often

available due to its size or the scarcity of comparable projects. Consequently, financial, economic, environmental and social feasibility studies, as well as unsolicited proposals, have more room for manipulation (OECD, 2016).

In order to counteract this, the following policy options could be adopted:

- Fostering objectivity and credibility of social, economic and environmental feasibility studies through well-evidenced, comprehensive and multi-dimensional assessment processes, as well as guiding the use of public official discretion and mitigating risks, for instance by:

  - Developing standardised assessment guidelines. For example, the HM Treasury of the UK issued a Green Book to guide central government on how to appraise infrastructure projects based on the Five Case Model. This is a good practice approach to business case development according to five dimensions (strategic, economic, commercial, financial and management). Furthermore, G20 Leaders endorsed the G20 Principles for the Infrastructure Project Preparation Phase to improve assessments of project rationale, options appraisal, commercial viability, long-term affordability, and deliverability to build a pipeline of well-prepared and bankable projects that are attractive to private investors.

  - Broadening the decision-making basis by selecting external experts to conduct a feasibility study based on a transparent procurement process. For example, the Government of Gujarat, India, selected a consulting firm through a competitive bidding process to undertake a technical economic feasibility study of the Vadodara Halol Toll Road (VHTR).

- Ensuring that delivery modes of infrastructure projects are assessed against value for money and represent the optimal allocation of responsibilities and risks given the specific characteristics of the planned infrastructure. For example, the Productivity Commission in Australia developed guidance on the typical allocation of responsibilities and risks according to different delivery modes.

- Having a clear process to compare between different delivery modes and determine whether a project is suitable for a Public-Private Partnership (PPP) model (relative value for money analysis). For instance, the PPP unit of Victoria, Australia (Partnership Victoria) uses a public sector comparator that takes into account the risks that are transferable to a probable private partner, and those risks that will be borne by the government.

I.III. Planning phase

During the planning phase, clear regulations and legal requirements concerning the transparent and fair development of the bidding documents and terms of reference are essential to guide a public official's discretion or avoid private interests from exerting undue influence on the process. In addition, openness and external scrutiny can be helpful in curbing corruption in the process (OECD, 2016).

Specific policy options could include:

- Ensuring equal access of actors to relevant information, for instance by:

  - Digitalising information and fostering the release of data in open and machine-readable formats to facilitate data accessibility, usefulness and re-use. In Italy, the online portal Opencantieri, managed by the Ministry of Infrastructure and Transportation, provides open, complete and up-to-date information on Italy's ongoing public infrastructure projects. The website

(http://opencantieri.mit.gov.it/) hosts the platform containing the available data and provides a synthesis as well as specific insights on issues such as financing, costs, timing and delays. All the information is publicly accessible and can be downloaded through the Ministry of Infrastructure and Transportation's open data portal (http://dati.mit.gov.it/catalog/dataset).

- Disseminating public procurement information through comprehensive e-procurement systems, making them available as open data (e.g. according to open contracting principles and standards) whenever suitable and in a manner that respects data protection laws. For example, the National Government Procurement Electronic System in Saudi Arabia (Etimad), managed by the Ministry of Finance, aims to create a transparent standard system and to ensure the digital transformation by enabling the government agencies to publish all of their public procurement activities. In Russia, the information on the contracts system in the realm of public procurement is published on an information system giving free and unlimited access to stakeholders. This includes the digitalisation of all standard procurement procedures, including for those tenders that are open to Small and Medium-sized Enterprises (SMEs). In India, the Central Public Procurement Portal (htt://eprocure.gov.in) is available as a platform for all types of procurement (Goods, Services & Works) strengthening transparency, reliability and non-discrimination amongst bidders by allowing free access to tender documents, clarifications, secure on line bid submission and access to bid opening event to all. E-procurement is mandatory in all EU Member States and the European Commission maintains the Tenders Electronic Daily (TED) database. The online version of the 'Supplement to the Official Journal of the European Union' is updated regularly with tenders from across Europe. Furthermore, in the EU, contracts above a certain value (EUR 10 Million for public works and EUR 1 Million for goods and services) must be made available on request; exceptions are only allowed in the case of commercially sensitive information. Promoting transparency and competition in the contracting and execution of public works, since 2016 the Ministry of Transport of Argentina implemented a series of measures that generated an immediate impact on the contracting processes: publication of general guidelines allowing more time to prepare offers; publication of bidding conditions in a free and accessible format through the web; complete digitization of offers and work files to make processes transparent. Among other consequences, these efforts, aligned with initiatives in other G20 countries, resulted in an increase of the number of bidders (from ten companies to up to twenty in some instances). In South Africa, according to the Treasury Regulation 16A, bids are advertised in the Government Tender Bulletin for a minimum period of 21 days before closure, except in urgent cases when bids may be advertised for a shorter period as the accounting officer or accounting authority may determine. Bid opportunities are also advertised in other media (both electronic and print) and the Office of the Chief Procurement Officer (OCPO) website. Information relating to procurement procedures and contracts are publicly distributed and available including through the OCPO - e-tender portal (http://www.etenders.gov.za/ and Central Supplier Database: https://secure.csd.gov.za/).

I.IV. Tendering phase

The tendering phase is when suppliers decide to respond to public needs by submitting an offer, when bids are evaluated and contractor(s) selected based on their technical and cost proposal. The criteria for selection need to be clear and transparent; the decision needs to be unbiased and the officials in charge should not have any conflict of interest arising from the bidding and contracting process (OECD, 2016).

Specific policy options could include:

- Ensuring that the winning bidder is the most qualified, for instance by:

    - Inviting civil society to monitor that the process is carried out transparently and with integrity. In Mexico, social witnesses are required to participate in all stages of the public tendering procedures above a certain threshold as a way to increase transparency in the public procurement process.

    - Including a detailed description of the circumstances considered to constitute a conflict of interest according to the law or framework regulating conflict of interest. For example, the German Regulation on the Award of Contracts includes a detailed list of the situations where a conflict of interest exists and requires the person concerned to recuse themselves of the specific procurement procedure.

    - Actively predicting, identifying and managing conflict-of-interest situation, also by applying innovative data-driven approaches, which might impact the contract awarding. The Department of Planning, Transport and Infrastructure in South Australia provides procurement officials with examples of situations that would be considered as a conflict of interest of a public official in relation to a company submitting a tender. Where applicable, public officials could be mandated to disclose their assets and interests. New Zealand requires any public officials involved in a procurement activity to complete a 'conflict of interest and confidentiality agreement', stating any actual, potential or perceived conflicts of interest and detailing how a conflict of interest will be managed, before developing tender documents, joining an evaluation panel or making any other relevant decision. In Turkey, the Public Procurement Law has detailed provisions with regards to persons and authorities who cannot participate in any procurement, directly or indirectly or as a sub-contractor, either on their own or on behalf of others, in order to prevent conflict of interest. In South Africa, Section 8 of the Public Administration and Management Act, 2014, prohibits employees in the public administration and advisors to executive authorities from conducting business with the state in order to prevent conflict of interest. Such employees are red flagged if they register as potential suppliers in the National Treasury's Central Supplier Database (CSD). Furthermore, all officials involved in the bidding process must declare their financial interests and recuse themselves from any decision making that may result in improper personal benefit.

    - Enforcing cooling-off periods to prevent former civil servants and ministers being able to profit from knowledge and contacts gained throughout their public service career. For example, in the UK, ministers and senior crown servants must seek permission of the Advisory Committee on Business Appointments before taking on any new paid or unpaid appointment within two years of leaving ministerial office or Crown service reviews the UK Business appointment rules for civil servants. In the United States, public procurement officials are prohibited from accepting compensation from a contractor for one year following their government employment if they served in certain decision-making roles with respect to a contract awarded to that contractor. They are also required to disclose any contacts regarding non-Federal employment by an offer or on an active procurement, and either reject such offers of employment or disqualify themselves from further participation in the procurement.

    - Applying clearly pre-defined criteria in public tenders and comparatively assessing proposals both on financial and technical merits. For example, the construction of the aquatics centre for the 2012 London Olympics and Paralympic Games has been awarded based on the Most Economically Advantageous Tender (MEAT) criterion in the sense of assessing other components than price.

- Providing debriefing by the government to aggrieved bidders to provide a better understanding of how the decision was reached and thereby increasing understanding of the integrity of the process. For example, in the UK all procurements by public bodies must be conducted in line with regulations that instruct contracting authorities to provide all bidders with a notice communicating its decision to award the contract. This includes the criteria for award and the reasons for the authorities' decision including the characteristics and relative advantages of the successful tenderer.

- Increasing access to information by providing public purchasers and companies, including SMEs with up-to-date information on public procurement through accurate guides. In France, for instance, the Legal Affairs Department (DAJ), which is responsible for developing regulations on public procurement, has developed numerous guides, such as the good practice guides on public procurement, dematerialisation, or access to public procurement by SMEs. The DAJ guides invite public purchasers to follow the recommendations of international organisations such as the *OECD Recommendation on Public Procurement* and to respect transparency in the different stages.

- Assuring the integrity of bidding companies, for instance by:

  - Applying official debarment lists to exclude suppliers not upholding integrity standards. For example, the exclusion list of suppliers, such as the EU debarment system and the Multilateral Development Banks' cross debarment list. This should include strengthening the harmonisation of anti-corruption and debarment clauses between the latter. Similarly, China has a system of debarring companies with a poor track record in compliance and integrity, from participating in public procurement.

  - Listing companies, their owners and top management condemned for administrative or criminal offences (such as bribery, money laundering and tax evasion) and violations of competition and labour law. Enabling contracting authorities to check in a single nationwide electronic dataset whether a company has breached the law, Germany created, in 2017, a competition register listing companies convicted for criminal association, money laundering, fraud of the public sector, bribery and corruption in business transactions, trafficking in influence, human trafficking, and tax evasion. The register also includes companies that have violated environmental, social, or employment obligations and competition law (and whose offences resulted in fines above 50,000 euros) (Bundeskartelamt, 2017). According to Russian legislation, the owners and top management of entities who have been convicted of corruption, as well as entities charged for administrative offences according to article 19.28 'Illegal gratification on behalf of a legal entity' of the Code of Administrative Offences of the Russian Federation, cannot participate in public procurement processes. In order to check if participants in procurement proceedings have not been convicted, the General Prosecutor's Office of the Russian Federation maintains the register of legal entities charged with administrative offences under article 19.28, which is published on the Internet. In South Africa, the National Treasury keeps a database of restricted suppliers on their website (www.treasury.gov.za). The Restricted Suppliers database contains the names of companies and individuals banned from doing business in the public sector because of failure to perform in previous contracts, corruption, fraud, tender irregularities etc. The Treasury Regulation 16A9.1c. requires all accounting officers to check the list of Restricted Suppliers prior to awarding any contract to ensure that the recommended bidder or any of its directors are not in the register. In addition, institutions can develop their own internal lists. The CSD flags directors of companies and individuals who

are employees in the public administration and as such are also prohibited from conducting business with the state.

- Establishing specific restrictions on government suppliers, such as in the EU where conflicts of interest provide for ground for exclusion of bidders from the procurement process. Similarly, in the case of the Bicol International Airport Development Project in the Philippines, bidders with conflict of interest were disqualified from the procurement process. In Argentina, Decree 202/17 obliges any person who participates in a public tender to submit a declaration of interests in order to prevent, identify and manage a potential or apparent conflict of interest and provide greater transparency.

- Establishing integrity programmes and guidelines for the private sector, where appropriate. For example, Indonesia developed the voluntary programme National Movement for Integrity Development in the Business Sector with the tagline "Professional with Integrity (PROFIT)". PROFIT is a Business Integrity Development Movement involving business sector as focal point, together with regulator, law enforcement officials and community in general. It consists of the following activities:

    - Establishing the Anti-Corruption Advocacy Committees in national and local level as a communication forum for private business and regulatory agencies (public-private partnership);
    - Establishing the Corruption Prevention System Guideline for Corporations/Enterprises in response to the enactment of the Supreme Court Regulation No. 13 of 2016 on the Procedure of Corporate Criminal Liability, and disseminate it progressively. In 2019, it focuses on piloting the implementation in eight sectors, which have been identified as the most vulnerable sectors to corruption;
    - Implementing Anti-Bribery Management in Government and Private Sector;
    - Establishing a programme aimed at enhancing integrity competence standard for Integrity Officer (Certified Integrity Officer programme);
    - Establishing communication strategies to implement PROFIT in the business sector; and
    - Establishing close cooperation with business sector to implement the business integrity development programme.

- Implementing a strong regulatory system for State-owned Enterprises (SOEs), for instance by encouraging SOEs to develop codes of conduct to promote integrity and transparency and covering the relation with consumers, such as the collection of bills. State ownership entities – that is, the entities or co-ordinating agencies charged with exercise of ownership on behalf of the state – may expect SOEs to develop codes of conduct, ethics or similar. For instance, Brazil's "Statute of SOEs" (Law 13.303/2016) provides for SOE adoption of a Code of Conduct and Integrity that includes the prevention of conflicts of interest and prohibition of acts of corruption and fraud. Codes should also refer to the channels available to receive internal and external information concerning, among other things, the practice of acts of fraud and corruption (hotline). China's Guideline on Corruption Risk Management for Central SOEs in 2012 and the Provisional Guidance on Compliance Management for Central SOEs of November 2018 require central SOEs to enhance compliance management as they invest and operate overseas, set red lines for overseas investment and operations, and establish institutions, systems and procedures for operational compliance, with a view to addressing compliance risks in major decision-making, important contracts, management of large volumes of funding, and corporate governance of their overseas subsidiaries. In Argentina, the Guidelines on the Good

Governance of SOEs establish good practices for the overall organisation and specifically for the functioning of the Boards and for senior managers. They contain components related to strengthening transparency, integrity, audit and control, economic performance, procurement and supply and sustainability. Specifically, "Component 6: Procurement and Supply Policies" highlights the relevance of promoting transparency and integrity at all stages of the procurement process.

- Requiring that bidders submit a certificate of independent bid determination (CIBD), i.e. a signed statement that the bid is genuine, non-collusive and made with the intention of accepting the contract, if awarded. Requiring a CIBD can be an important deterrent to bid rigging. First, a CIBD makes firms aware of the unlawful nature of collusive agreements. It also demonstrates that the contracting authority is alert to bid rigging, and will check signs of suspicious behaviour by bidders. Lastly, a CIBD makes the legal representatives of firms directly accountable for any unlawful behaviour. For example, since January 2019, the Argentinian National Directorate of Roads (Dirección Nacional de Vialidad, DNV) decided to require a CIBD in all its tenders (OECD, 2019 (forthcoming)).

- Implementing company beneficial ownership registers, which are accessible, searchable and downloadable by the public without a fee, in accordance with open data best practice. Beneficial ownership information can be used to identify the real owners and controllers of companies who are profiting from infrastructure projects.

I.V. Implementation and contract management phase

The implementation and contract management phase concerns the actual construction or maintenance work. This phase implies the attribution of management responsibility to ensure proper management of works and outputs and responsibility lines. The concretisation of the selected proposal brings about many new decisions related to the supplied material, the timetable, labour arrangements and any other possible unexpected event that might change the initial agreement. It is essential to have a mechanism in place to ensure the contract is implemented properly without unjustified changes in costs or level of quality and to ensure the quality of the infrastructure project throughout its life cycle (OECD, 2016). Furthermore, it is vital that government authorities meet their commitments, such as payment in time, to not incentivise the private sector to commit integrity breaches.

The following examples reflect good practices to limit opportunities for corruption:

- Ensuring that there is no false reporting of invoices, for instance by:

  - Making the estimated cost of the project, contract modifications and the final cost incurred publicly available to public officials and civil society. In Spain, the 2017 Public Procurement Law has significantly expanded the number of documents and information that contracting entities must make public, including through their "contracting entity profiles" in the e-Procurement Portal. Transparency obligations also cover the contract execution phase (contract modification notice and rationale, any appeals during the execution phase as well any contract suspensions as a result of those appeals). In Brazil, the "Portal de Compras" allows both public officials and civil society to oversee ongoing public infrastructure projects. For example, through the portal it is possible to access information related to procurement processes, contracts, average prices, providers/contractors, among others. In France, Etalab is responsible for implementing a new legal obligation for 70,000 French public purchasers (local authorities, ministries, public hospitals, etc.): the publication in open data format of data relates to public

contracts and concessions (totalling 130 billion euros) known as "critical data" for amounts exceeding 25,000 euros. This includes information such as, but not limited to, the market identifier; the name of the public purchaser; the date of notification; the subject, amount and duration of the contract and changes in duration, amount or incumbent companies that may occur throughout the duration of the contract. Furthermore, in the EU, modification of contracts without a new tender procedure is strictly regulated.

- Covering the entire public procurement cycle, including the contract management phase and project variations and reasons for overrun in an e-procurement system. The Korean e-procurement system, KONEPS, is a fully integrated end-to-end procurement system collecting information on bidder's qualifications, delivery report, e-invoicing and e-payment. The system also provides project information on a real-time basis. According to the Public Procurement Services, the system has boosted efficiency, improved transparency and eliminated instances of corruption by preventing illegal practices and collusive acts (OECD, 2016). In Turkey, the digitalisation of the procurement process is one of the primary objectives of the Public Procurement Authority (PPA), which operates an e-procurement system called Electronic Public Procurement Platform (EKAP). The tool helped the procurement process to become more transparent and effective, faster and competitive, leading to important savings for contracting authorities. All contracting authorities within the scope of the Public Procurement Law have to use EKAP, and all tender notices are freely accessible on EKAP. Similarly, in the Ukraine, the integrated e-procurement system ProZorro provides procurement data through an open and free portal. Started in 2016 by a civil society initiative, the majority of Ukrainian tenders are today awarded through ProZorro, and its data is used to increase transparency in Ukrainian public procurement. Documented savings through the project can be assessed via the monitoring section of its website.

• Ensuring that there is no delay in the delivery of the infrastructure project, for instance by:

- Creating a website that monitors in real time the advancement of the public infrastructure project. The Colombian "Rolling on the Road" (Rodando la Vía) Initiative requires inspectors of road infrastructure projects to upload videos of the works in progress on an online platform. This allows citizens to oversee the development of the public infrastructure projects and to raise complaints in case they identify a wrong use of resources. Similarly, in Myanmar, the Asian Development Bank (ADB) used geotagging, a method of capturing photos and videos using cameras and mobile phones with built-in global positioning system receiver and associating these with geographical coordinates, to verify the accuracy of project progress reports and inspect the project outputs of a road infrastructure project (ADB, 2017).

- Enhance citizen participation in the implementation and monitoring phase. The Ministry of the Treasury and Public Credit in Mexico, in collaboration with the Global Initiative for Fiscal Transparency, launched the "Data on the Streets" (Datos en la calle) Initiative. Through this initiative, citizens visit in person the community of their choice and verify in situ the information contained in the government platforms, in order to take note of what they see, and report their experience and findings through social networks and other available media channels. In China, a specific website was created to publicise information concerning the construction progress of all 2008 Olympic venues, and also other relevant information. This allowed the public to monitor the whole process in constructing the venues. For a seismic safety school reconstruction programme in Armenia, ADB entered into an agreement with Integrity Action to cooperate on community monitoring of school construction. Integrity Action conducted a competitive selection of Armenian Non-Governmental Organisation (NGO)

partners and trained the NGOs on the use of the DevelopmentCheck app[2]. The Armenian NGOs led by the Armavir Development Centre trained six community monitoring teams which in turn have helped identify a range of issues that are currently being addressed by government, ADB and contractors (ADB, 2016 and 2015).

- Holding contractors accountable to project specifications and professional standards, for instance by:

    - Requiring a strong and effective regulatory system reinforcing accountability and transparency by ensuring that contract modifications are justified and no lower quality materials are accepted than those specified. In Switzerland, supervision of road construction projects includes frequent testing of materials by two independent laboratories, one mandated by the Federal Roads Office and one mandated by the contractor.

- Encouraging SOEs to have clear rules for engaging and, if necessary, disengaging with third parties including, for instance by:

    - Integrating SOE expectations on anti-corruption into contracts and retaining the right to dissolve the contract if the third party violates the agreement. This is practiced by SOEs in Italy and Switzerland, amongst others, often at the impetus of the SOE itself.

    - Seeking to ensure that no impermissible changes are possible once the agreement has been signed. Finland's Act on Public Procurement and Concession Contracts (1397/2016) provides clear grounds under which contracts can be amended without having to reopen a public procurement. The law applies also to state-owned enterprises (SOEs), whose compliance is moreover reinforced through the government's resolution on state-ownership policy that sets expectations for SOEs to ensure corporate social responsibility in its business operations and value-chain.

I.VI. Detection of corruption and enforcement in infrastructure development

The detection of integrity violations and effective enforcement mechanisms are the necessary "teeth" to any country's public integrity framework and are a principal means by which governments can ensure compliance and deter misconduct. If carried out in a coordinated, transparent, and timely manner, they can also promote confidence in the governance framework of infrastructure projects and serve to strengthen its legitimacy over time.

The following examples reflect good practices to facilitate detection and ensure effective enforcement:

- Establishing effective reporting channels for complaints and for reporting misconduct, corruption and fraud for suppliers, public sector employees and individuals, for instance by:

    - Establishing alternative reporting channels to offer individuals a choice to whom to disclose. For example, in Canada, disclosures can be made to the immediate supervisor, senior officers responsible for internal disclosures or to the Office of the Public Sector Integrity Commissioner of Canada. In South Africa, the Protected Disclosures Amendment Act, 2017 expanded the list

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2 The DevelopmentCheck app is a beneficiary feedback system that allows local communities to access project information, report implementation problems and confirm whether these have been addressed (https://www.developmentcheck.org/)

of persons and institutions to which employees can report unlawful or irregular conduct by employers and fellow employees. These include legal advisor, employer, member of cabinet / Executive Council of Province, the public protector, South African Human Rights Commission, Public Service Commission, and Auditor- General. In addition. the Public Service Commission is managing a National Anti-Corruption Hotline, designed to enable members of the public and public servants to report any form of corruption by using a toll free number (0800 701 701).

- Setting clear procedures for handling complaints and investigating reports. In the Slovak Republic, there are specific requirements for employers with more than 50 employees to establish reporting channels, coupled with the duty to issue an internal regulation outlining specific measures regarding confidentiality, processing of personal data, keeping record of the disclosure within a specific registry and following up with the discloser upon assessment of the disclosure.

- Creating an integrated online platform that support government transparency and public reporting. For example, Indonesia has several online platforms to facilitate public monitoring and reporting such as LAPOR! (Online Public Complaint and Aspiration Service), JAGA (Online platform aimed at increasing public participation in monitoring public services, especially education, health and licensing), Satu Data Indonesia (Indonesia One Data), Initiative Integrated One Stop Service (PTSP), and Data Portal for the State Budget (APBN), as well as the establishment of SP4N (National Public Service Complaint Management System). Ensuring whistleblower protection, for instance by:

  - Adhering to international guidance for businesses on whistleblower protection, such as the World Bank Integrity Compliance Guidelines and the UN Convention against Corruption.

  - Establishing a dedicated whistleblower protection framework for public and private employees reporting misconduct, corruption and fraud. Ireland, for example, introduced the Protected Disclosures Act in 2014 providing protection from dismissal and any other form of penalisation to all workers, including employees, contractors, agency workers, and trainees who make a protected disclosure.

  - By allowing the general public to identify an authority to which alerts can be reported. In France, for example, a report can be made to the Ombudsman/Defender Rights (Défenseur des droits). This independent authority directs whistleblowers to the competent authorities and puts in place guides for issuing alerts to the public.

- Ensuring an effective internal control process based on risk assessment, for instance by:

  - Conducting periodic risk assessments to inform decisions about strategy and control activities, in line with international standards, such as the frameworks of the Committee of Sponsoring Organisation of the Treadway Commission (COSO) or International Organisation of Standardization (ISO).

  - Establishing a clear procedure for dealing with unexpected risks, and mechanisms through which advice is provided. For example, senior managers at Transport Infrastructure Ireland established risk management policy, risk mapping process and fraud risk register to identify and manage the areas of a project, which are vulnerable to fraud and corruption risks.

  - Review that internal control and risk assessment procedures have been implemented and review them where necessary. For example, every year, the ADB Office of Anticorruption and

Integrity selects high-risk infrastructure projects and tasks a team of specialists to verify if the projects comply with the ADB's policies on procurement, financial management and asset management. The purpose of this review is to check whether the internal controls and governance of each project are sufficiently robust to prevent integrity violations and ensure funds are used for intended purposes and beneficiaries. If there are shortcomings, the ADB engages with the relevant country officials and recommends remedial actions. The ADB also conducts follow-up reviews to verify the implementation of recommendations. Results of proactive integrity reviews are published on the ADB's website to promote transparency and accountability as well as share lessons learnt (ADB, 2019).

- Ensuring adequate and timely sanctions through the disciplinary system, for instance by:

    - Promoting mechanisms for co-operation and exchange of information between the relevant bodies, units and officials. In Brazil, the Disciplinary Proceedings Management System (*Sistema de Gestão de Processos Disciplinares*, CGU-PAD) allows to store and make available, in a fast and secure way, information about the disciplinary procedures instituted within public entities.

    - Encouraging transparency within public sector organisation and to the public about the effectiveness of the enforcement mechanisms and the outcomes of cases. In Colombia, the Transparency and Anti-corruption Observatory publishes on its website updated statistics on corruption-related criminal, disciplinary and fiscal sanctions.

- The criminalisation of bribery of public officials, both domestic and foreign, is a legal requirement for all G20 countries under UNCAC, the OECD Anti-Bribery Convention and other regional instruments. This can be done in a number of ways, for instance by:

    - Adopting clear and explicit legislation on the domestic and foreign bribery offences, which cover the key elements of the internationally agreed definitions, including offering, promising or giving of a bribe, bribery through intermediaries, and bribes paid to third party beneficiaries, as provided under relevant Articles of the UNCAC and OECD Anti-Bribery Convention. This can be achieved through amendments to the Criminal Code, as done by Italy and China, or adoption of specific legislation, such as the UK Bribery Act or the Foreign Corrupt Practices Act in the United States.

    - Adopting effective systems for liability of legal persons for corruption offences, following international standards such as the G20 High Level Principles on the Liability of Legal Persons for Corruption and Annex I to the 2009 OECD Anti-Bribery Recommendation.

- Establishing a legal framework that allows for effective enforcement of domestic and foreign bribery laws, including in the context of infrastructure projects, covering areas such as jurisdiction, statute of limitations, corporate liability and ensuring the independence of enforcement processes from political interference, for instance by:

    - Establishing specialised units with adequate resources and expertise to deal with corruption and bribery investigations and prosecutions. For instance, in Germany, the *Länder* have either set up special anti-corruption units or dedicated public prosecution offices that specialise in investigating economic crimes, with similarly specialised directorates in the police forces of the *Länder*. Canada has set up a specific Royal Canadian Mounted Police (RCMP) unit to investigate transnational bribery cases. The United States also has longstanding units to deal with foreign bribery investigations in the Federal Bureau of Investigation (FBI), the

Department of Justice (DOJ), and the Securities and Exchange Commission (SEC). In France, the Parquet National Financier (PNF) is an investigation and prosecution unit specialising in serious and complex financial crime, including the corruption of foreign public officials. It is assisted by the services of the Central Office for the Fight against Corruption and Financial and Fiscal Offences (OCLCIFF).

- Ensuring independence of law enforcement authorities from political pressures, as noted in G20 Guiding Principles on Enforcement of the Foreign Bribery Offence and Article 5 of the OECD Anti-Bribery Convention. In Italy, public prosecutors are independent from government and, once assigned to a case, a prosecutor has total autonomy from other prosecutors as well, in combination with mandatory criminal action. In the Netherlands, the Instruction on the Investigation and Prosecution of Corruption of Public Officials Abroad explicitly requires prosecutors to not allow themselves to be influenced by considerations of national economic interest, the possible effect on the relationship with another state or the identity of the natural or legal persons involved, in line with Article 5 of the OECD Anti-Bribery Convention.

- Developing detection capabilities by mobilising all stakeholders with a potential to detect corruption or bribery in infrastructure projects. In addition to whistleblowers, mentioned above, this could include mobilising government agencies such as Financial Intelligence Units (FIUs), the tax administration, diplomatic missions, export credit and Official Development Assistance (ODA) agencies, as well as the private sector, the media and civil society, for instance by:

  - Ensuring adequate training and awareness of corruption red flags in key government agencies. The Netherlands Financial Intelligence Unit is member of the Financial Expertise Centre and delivers knowledge and expertise to various "Taskforces" and "Fusion Groups" on topics to improve the integrity of the financial sector and infrastructure in the Netherlands. The Swedish International Development Cooperation Agency (SIDA) has developed a list of red flag indicators to identify potential corruption in ODA-funded projects.

  - Developing a reporting and cooperation framework for officials for the sharing of information with law enforcement. In Japan, during the course of joint investigations between tax inspectors and public prosecutors into allegations of tax evasion by a company, public prosecutors identified slush funds, which had been used for bribing a senior official of a foreign public procurement authority in relation to a substantial infrastructure project that was financed in part by official development assistance from Japan.

  - Opening up government procurement data and implementing open contracting practices to empower a broader range of actors, including civil society organisations and investigative journalists, to follow financial flows better, monitor government performance and reinforce transparency and accountability.

- Facilitating law enforcement cooperation across borders, taking into account the fact that large infrastructure projects often involve multiple stakeholders from different countries, for instance by:

  - Developing a national framework for international cooperation following the guidance laid out in the G20 High-Level Principles on Mutual Legal Assistance (MLA).

  - Fostering strong relationships between law enforcement agencies and law enforcement authorities, domestically and internationally, with a view to building trust and facilitating informal cooperation, which in turn may lead to more efficient formal MLA. This can include encouraging participation of law enforcement officials in international and regional networks

focusing on international cooperation in anti-corruption and related matters, e.g. the Camden Asset Recovery Inter-Agency Network (CARIN), the Iber Red network, and the OECD Working Group on Bribery Law Enforcement Officials' meetings and regional law enforcement networks (LEN). Bilaterally, joint task forces can enhance cross-border law enforcement cooperation. For instance, China and Laos set up a task force composed by the law enforcement authorities of both sides to monitor the ongoing China-Laos Railway Project and other infrastructure projects.

- Coordinating investigative efforts by relying on multi-jurisdictional or parallel investigations. For instance, in 2016, Brazil, Switzerland and the United States reached a coordinated resolution with a company for its involvement in a complex bribery case under which contracts of infrastructure projects were secured by resorting to the payment of bribes to government officials, politicians, and political parties in several countries in Latin America and Africa.

I.VII. Evaluation and audit phase

Evaluation and auditing of public investment projects reaffirms its significance when considering its role in delivering public policy goals. The evaluation and audit phase of a public investment project can also partially assess the achievements of the government in delivering public policy goals. Given the importance of the audit function for integrity throughout the investment project cycle, operational independence and protection from external and undue influence are critical.

Specific policy options could include:

- Ensuring an independent audit process, for instance by:

    - Providing adequate capacity and resources to provide timely, standardised and reliable audits. For example, the UK National Audit Office introduced in 2010 guiding principles for an improved assurance system for high risk projects including those of infrastructure nature. The overall objective of timely and reliable assurance is to help identify and reduce risks to successful delivery of project outcomes. Throughout the preparations of the XXII Olympic Winter Games and XI Paralympic Winter Games in Sochi in 2014, the Accounts Chamber of the Russian Federation, in addition to the control over the activities of the State Corporation Olympstroy, monitored the implementation of legal requirements for contracts and contracting system with the participation of all auditing divisions every three months. The analysis concerned planning and distribution of financial resources, including capital expenditure, in relation to the approved financial plans and construction schedules in order to prevent the growth of expenses.

    - Elaborating specific code of conducts regarding auditors contact with contractors. For example, the International Organisation of Supreme Audit Institutions developed a Code of Ethics for auditors in the public sector structured around five areas: 1) Promulgation of trust, confidence and credibility 2) Integrity, 3) Independence, objectivity and impartiality 4) Professional secrecy 5) Competence.

    - Leveraging open data to ensure improved transparency and accountability. For example, Ukraine is planning to connect its public procurement platform, the Prozorro platform, which is based on the Open Contracting Data Standard (ODCS). Building on this work, the Construction Sector Transparency Initiative (CoST) has launched the Open Contracting for Infrastructure Data Standard, connecting infrastructure project-level information with

information on individual contracts enabling governments to 'see' the whole project cycle from planning to the final close of contracts.

II. Key enablers for mitigating the risk of corruption in infrastructure development

In addition to strong and effective regulatory systems, there are several enablers for ensuring the effective implementation of the measures detailed, not unique to a particular stage or phase, but rather critical throughout the entire investment cycle:

- **Professionalisation and capacity building of public servants and suppliers**: Given the high complexity of large-scale infrastructure projects, highly qualified and specialist staff (or independent consultants) are necessary at every stage of the process. Capacity-building and raising awareness efforts helps familiarise public officials and suppliers with the integrity measures in place to prevent corruption. They increase their knowledge about integrity risks specific to infrastructure development, how to act when faced with a particular situation, such as how to prevent and manage, for example, conflict-of-interest situations, and equipping them with the skills to identify, seek out advice and guidance when required. In addition, by raising awareness about and building capacity, countries can cultivate a commitment amongst public officials for the public good. To be effective, capacity building should be ongoing, reaching beyond the initial on-boarding of the public officials and supporting the professionalisation of public officials throughout their careers.

- **Data standardisation and interoperability can help to strengthen scrutiny and accountability inside and outside the public sector**: The use of data standards (e.g. semantics, unique identifiers, formats) throughout the infrastructure project cycle can help to enable data interoperability and aggregating fragmented information and data silos (e.g. on project identification, appraisal, financing and implementation). This can help to enable data traceability providing interested stakeholders inside and outside the public sector with a holistic view of the project development. Further, it offers opportunities to compare and benchmark the development stage of different infrastructure projects and therefore to identify deviations from standard patterns signalling potential risks of corruption or collusion. For example, the city of Buenos Aires implemented open data principles for the development of all infrastructure required for the 2018 Youth Olympic Games, allowing it to provide better and structured information the general public and to develop tailored communication strategies and social consultations. Likewise, Italy introduced the Building Information Modelling (BIM) methodology as mandatory for public procurement of infrastructure projects, in order to increase transparency, accountability, and social control. Partnerships such as the Contracting 5 (C5) (http://www.contracting5.org/), which groups Argentina, Colombia, France, Mexico, the UK, and Ukraine, are leading cross-national efforts to spur the definition and implementation of open contracting practices, including the adoption and use of the Open Contracting Data Standard (OCDS). This can strengthen the capacity to use open data as a tool to sustain anti-corruption efforts, nationally and across borders. The OCDS offers a series of guidelines regarding the release of standardised, high quality and reusable data and associated documents for each phases of a public contracting process.

- **Collaborative approach to assessing and mitigating the risk of corruption in infrastructure development by government, business and civil society:** By developing joint public and private sector integrity standards, countries can cultivate a mutual understanding for the corruption risks in each sector, the obstacles and difficulties to effectively apply risk mitigation strategies and develop solutions to overcome them jointly. For example, Integrity Pacts have been used in more than 18 countries worldwide, among others in Argentina, Bulgaria, China, Colombia, Ecuador, Germany, Hungary, India, Indonesia, Italy, Latvia, Mexico, Pakistan, Panama, Paraguay, Peru, Rwanda, South

Korea and Zambia. An Integrity Pact is a contract between a contracting authority and economic operators bidding for public contracts that they will abstain from corrupt practices and will conduct a transparent procurement process. To ensure accountability and legitimacy, an Integrity Pact includes a separate contract with a civil society organisation, which monitors that all parties comply with their commitments. The European Commission promotes the use of Integrity Pacts for safeguarding the EU funds against fraud and corruption and as a tool to increase transparency and accountability, enhance trust in authorities and government contracting, contribute to a good reputation of contracting authorities. Integrity Pacts, as a preventive and collaborative tool, can bring important cost savings, improve competition through better procurement and improve the governance of entire infrastructure project cycle. Another example, for a collaborative approach is the official arbitrage system of the Netherlands used to settle infrastructure disputes. The arbitrage system consists of experts on infrastructure and procurement who are selected by both the public and private sector. Before any disputes come to court, there is a mandatory dispute settlement committee. If the advice given by the committee does not lead to an informal settlement, it will be settled in this court. Another type of collaborative approaches include collective action. For example, the German Alliance for Integrity is a business-driven multi-stakeholder initiative, seeking to promote transparency and integrity in the economic system. To achieve this goal, the Alliance for Integrity facilitates collective action of all relevant stakeholders from the private sector, the public sector, civil society, international organizations and academia. By pooling expertise and resources, such as a training programme based on international good practice and peer-to-peer learning, the stakeholders jointly work on practical solutions to strengthen the compliance capacities of companies and their supply chains. CoST addresses these enablers by tackling mismanagement, inefficiency and corruption throughout the infrastructure cycle. CoST works with governments, industry and civil society to improve the performance and quality of infrastructure by promoting open contracting and facilitating civil society oversight of infrastructure investments. CoST has developed tools, guidance and support that assist governments, civil society and the private sector to disclose, validate and use infrastructure data. This includes the Open Contracting for Infrastructure Data Standard (OC4IDS) and an independent assurance process that turns infrastructure data into compelling information, highlighting issues of concern at each stage of the project cycle.

Annex – Supporting work from International Organisations

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